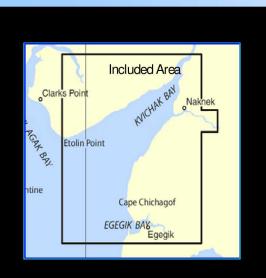
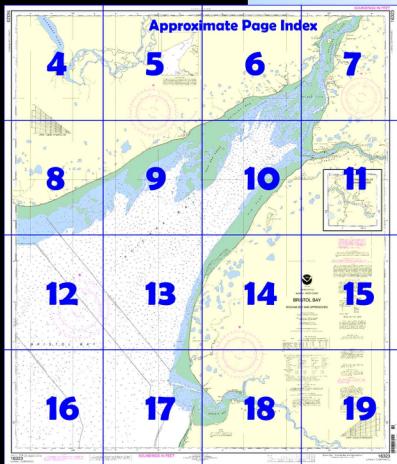
BookletChart

Bristol Bay - Kvichak Bay and Approaches (NOAA Chart 16323)

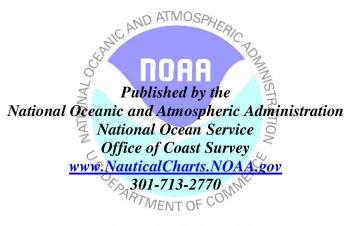


A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ☑ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.







What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart $^{\text{\tiny TM}}$?

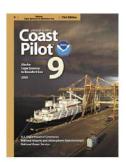
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 9, Chapter 8 excerpts]

112) **Kvichak Bay**, the large arm at the head of Bristol Bay, extends NE from a line between the S entrance point of Egegik River and Etolin Point. The bay is an important fishing area for red salmon and has several canneries in its N part. Kvichak Bay is navigable for deep-draft vessels as far as the anchorage about 270° from the entrance to the Naknek River. The approach from the SW is restricted to a channel about 4 miles wide by **Big Flat**, an extensive tide flat

extending off the E shore, and by **Dead Man Sands**, the large shoal in the middle of the bay NW of Johnston Hill. This shoal uncovers about 8 feet, and the area N of it is very foul. Fishing boats and collecting barges use the area at half tide or higher. Caution is necessary as a number of fishermen have been lost when trapped by the tides.

(134) **Naknek River** enters Kvichak Bay on the E side, about 10 miles S of Koggiung. **Cape Suworof** is the point on the N side of the entrance.

The large 60-mile-long river has its source in **Lake Naknek**, where there are two villages.

(145) **Naknek** is on the N side of the Naknek River about 1.5 miles from the mouth. A nurse is on duty during the winter, and, during the cannery season, each cannery employs a doctor whose services are available to the public for a fee. Weekly mail service is by plane throughout the year. Regular scheduled steamers also carry mail during the summer. A road leads 0.8 mile inland to a lake used as a landing place for floatplanes; another road goes about 12 miles SE to **King Salmon Airport**. Transportation over land in this area is entirely by plane. Several floatplanes at the inland lake are available for hire or charter. The airport has scheduled freight and passenger service to Anchorage. There is a telephone line from Naknek to the airport.

(147) **South Naknek** on the S side of the Naknek River directly across from Naknek, has a school and a cannery that operates a general merchandise store.

156) **Libbyville**, on the E side of Kvichak Bay, 3.5 miles N of Naknek River entrance, has a cannery with a 100-foot-long wharf.

(160) **Koggiung**, a village on the E side of Kvichak River, has several canneries. All of the wharves are dry at low water and have mud bottom alongside. All have water connections. Fuel oil, diesel oil, and gasoline are stored for cannery use.

(162) **Kvichak River** (see chart 16013), from Koggiung to Iliamna Lake, is 50 miles long. In the upper half of its course it is much broken by islands and bars into narrow, shallow channels. The lower half is tidal. (163) Occasionally vessels drawing 14 feet have ascended the river as far as the mouth of Alagnak River, but anchorage is difficult to find. Kvichak River is navigable for cannery tenders of 10-foot draft to **Alagnak River**, 22 miles above the mouth of Kvichak River. Launches of 3- to 4-foot draft can go on up into Iliamna Lake.

(164) In 1984, the channels through the entrance to Kvichak River were reported to be extremely changeable. Local knowledge is advised. (165) The Kvichak River has four recommended anchorages where mooring buoys are maintained during the fishing season. Water is available at the canneries.

(166) At **Graveyard Point**, near the mouth, fair protection is available in depths of 10 to 12 feet in all weather except strong SE storms. The bottom is fine gray sand with good holding ground.

(167) **Graveyard Point Light** (58°52'03"N., 157°00'47"W.), 55 feet (16.8 m) above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark 0.7 mile S of Graveyard Point.

(168) Off **Nakeen** and the mouth of **Squaw Creek**, good protection in all weather is afforded in depths of 13 to 23 feet. The bottom is fine gray sand; the holding ground is good.

(169) **Duck Creek Light** (58°57'18"N., 157°01'55"W.), 48 feet (14.6 m) above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on S point of entrance to Duck Creek. (170) At **Kvichak** good protection is afforded in depths of 8 to 10 feet in all weather except a strong N storm. The bottom is gray sand; the holding ground is good.

Corrected through NM Oct. 2

HEIGHTS

Heights in feet above Mean High Water.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

NOTE C CAUTION

Shoaling has been reported in the entrance channels to Kvichak River. Local knowledge should be used when navigating the area.

RADAR REFLECTORS

Rador reflectors have been placed on many floating aids to navigation. Individual rador reflector identification on these aids has been amitted from this cher omitted from this chart.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the J.S. Coast Guard Light Lists and National magery and Mapping Agency Publication 117. Radio direction-finder bearings to commercial proadcasting stations are subject to error and should be used with caution. Station positions are shown thus:

(Accurate location) o(Approximate location)

NOTE B CAUTION

Extensive shoaling has been reported in the entrance channel to Egegik Bay. Local knowledge should be used when navigating the channel

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

Mercator Projection Scale 1:100,000 at Lat 58° 36'

North American Datum of 1983 (World Geodetic System 1984)

SOUNDINGS IN FEET AT MEAN LOWER LOW WATER

LORAN-C GENERAL EXPLANATION

LORAN-C FREQUENCY100kHz.
PULSE REPETITION INTERVAL
9990
STATION TYPE DESIGNATORS: (Not individual sta-
tion letter designators)
M Master
W Secondary
X Secondary
Y Secondary
Z Secondary
EXAMPLE: 9990-Y

RATES ON THIS CHART

The Loran-C lines of position overprinted on this chart have been prepared for use with ground wave signals and are presently compensated only for theoretical propagation delays which have not yet been verified by observed data. Mariners are cautioned not to rely entirely on the lattices in inshore waters. Skywave corrections are not provided.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting pur-poses is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 2.637' southward and 7.717' westward to agree with this chart.

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 9 Additions or revisions to Chapter 2 are published in the Notices to Mariners Information concerning the regulations may be obtained at the Office of the Commander 17th Coast Guard District in Juneau, Alaska, contained the Chapter of the District Engineer, Corps of Engineers in Appendix Alaska.

Refer to charted regulation section numbers

Table of Selected Chart Notes

This nautical chart has been designed to promote safe navige Ocean Service encourages users to submit corrections, additions improving this chart to the Chief, Marine Chart Division (N/CS2 Service, NOAA, Silver Spring, Maryland 20910-3282.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast and Geodetic Survey with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard

CAUTION

chart has been corrected from the Notice to Mariners (NM) publishe by the National Imagery and Mapping Agency and the Local Notice (LNM) issued periodically by each U.S. Coast Guard district to the own in the lower left hand corner.

NOTE X

The 12 nautical mile territorial sea was established by Presidential Proclamation 5928, December 27, 1988, and is also the outer limit of the U.S. contiguous zone for the application of domestic law. The 3 nautical mile line, previously identified as the outer limit of the territorial sea, is retained because the proclamation states that it does not alter existing State or Federal law. The 9 nautical mile natural resources boundary off Texas, the Gult coast of Florida, and Puerto Rico, and the 3 nautical mile line elsewhere remain the inner boundary of the Federal fisheries jurisdiction and the limit of states' jurisdiction under the Submerged Lands Act (P.L. 83-31; 67 Stat 29, March 22, 1953). These maritime limits are subject to modification, as represented on future charts. The lines shown on the most recent chart edition take precedence.

COLREGS, 80,1705 (see note A) International Regulations for Preventing Collisions at Sea, 1972. The entire area of this chart falls seaward of the COLREGS Demarcation Line.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

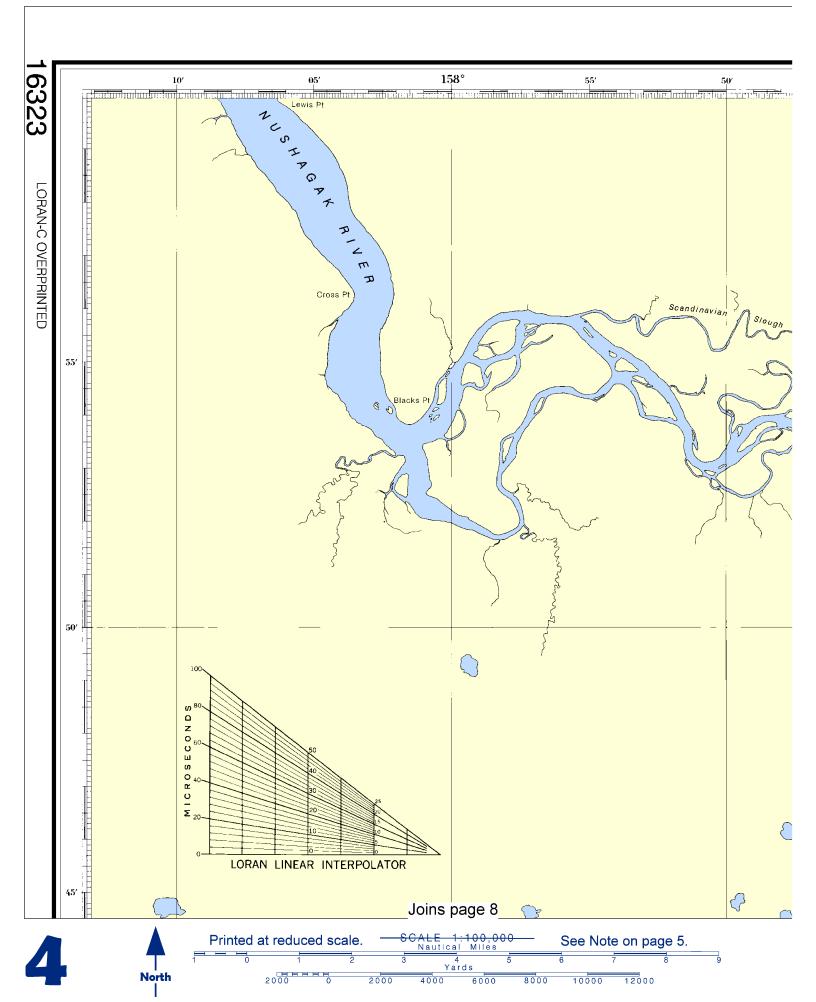
Aids to Navigation (lights are white unless otherwise indicated):
AERO aeronautical G green G green
Gp group
IQ interrupted quick
Iso isophose (E Int)
LT HO lighthouse
M noutical mile
m minutes
MICRO TR microwave tower Al alternating B black N nun OBSC obscured Rot rotating s seconds SEC sector St M statute miles Oc occulting Or orange Q quick R red Bn beacon DIA diaphone VO very quick W white E Int equal interval (Iso) Ra Ref radar reflector WHIS whistle R Bn radiobeacon Y yellow Bottom characteristics: Blds boulders

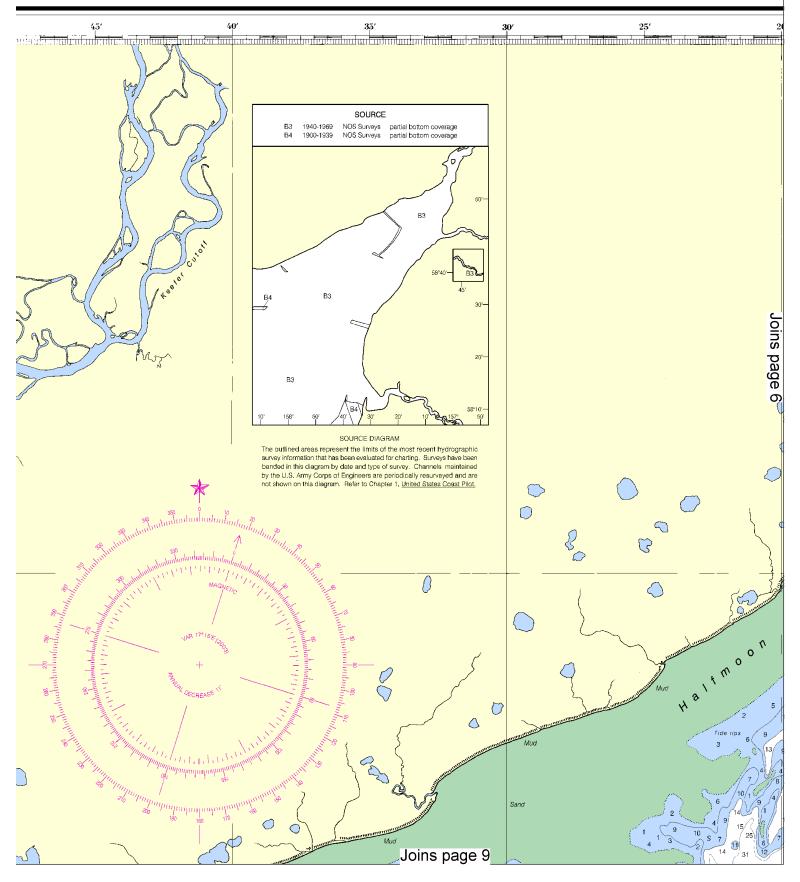
Didd boulders	OU COIGI	gy gruy	Oyo Oyotolo	30 3011
bk broken	G gravei	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky
liscellaneous:				

AUTH authorized Obstn obstruction PD position doubtful Subm submerged ED existence doubtful PA position approximate Rep reported 21, Wirock, rock, obstruction, or shool swept clear to the depth indicated.

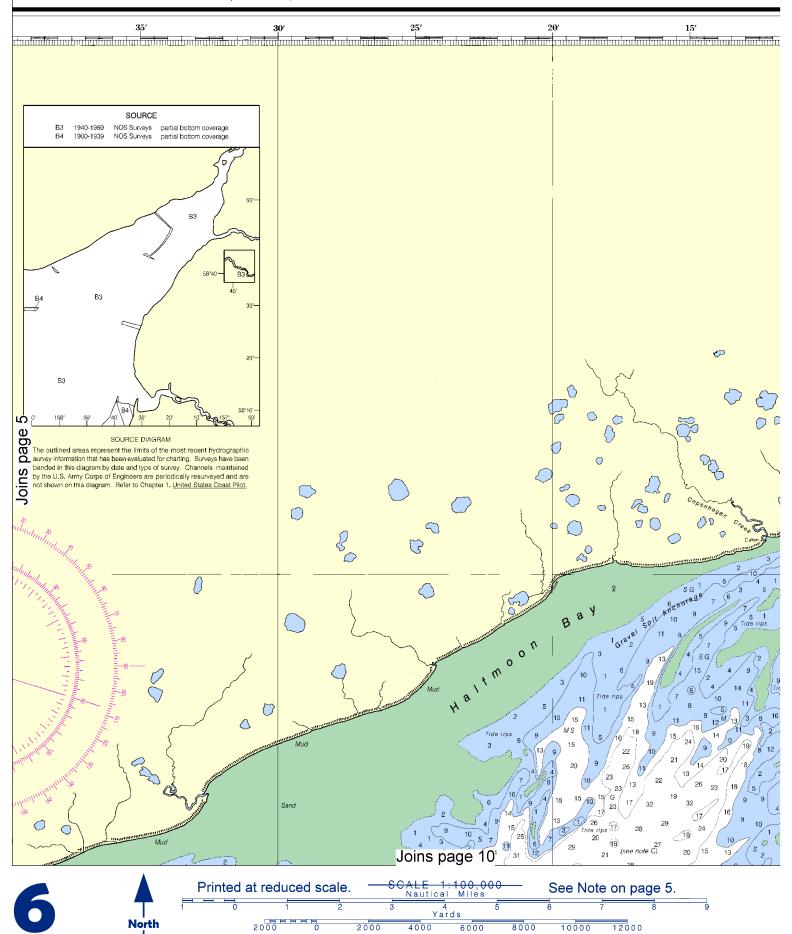
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

Place		Height referred to datum of soundings (MLLW)				
Name	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water	
		feet	feet	feet	feet	
Naknek River Entrance	(58°43'N / 157°03'W)	22.6	20.7	2.2	-2.0	
Naknek Air Base	(58°40'N / 156°39'W)	3.2	2.3	0.2	-3.0	
Egegik, Egegik River	(58°13'N / 157°22'W)	13.3	11.6	0.8	-3.0	
Kvichak, Kvichak River	(58°58'N / 156°57'W)	16.5	14.8	0.9	-3.0	
Note: Currents of 3 to 4 knots or more may be encountered in Naknek and Kvichak rivers See Tidal Current Tables, Pacific Coast of North America and Asia for predictions.						
(803)						

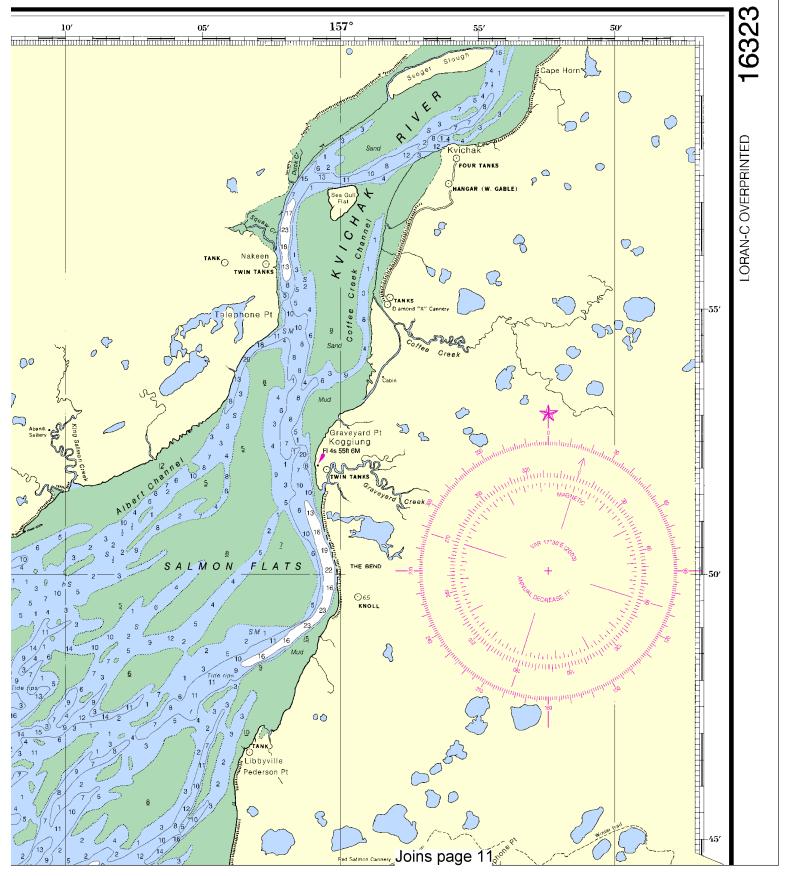




This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:133333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



SOUNDINGS IN FEET

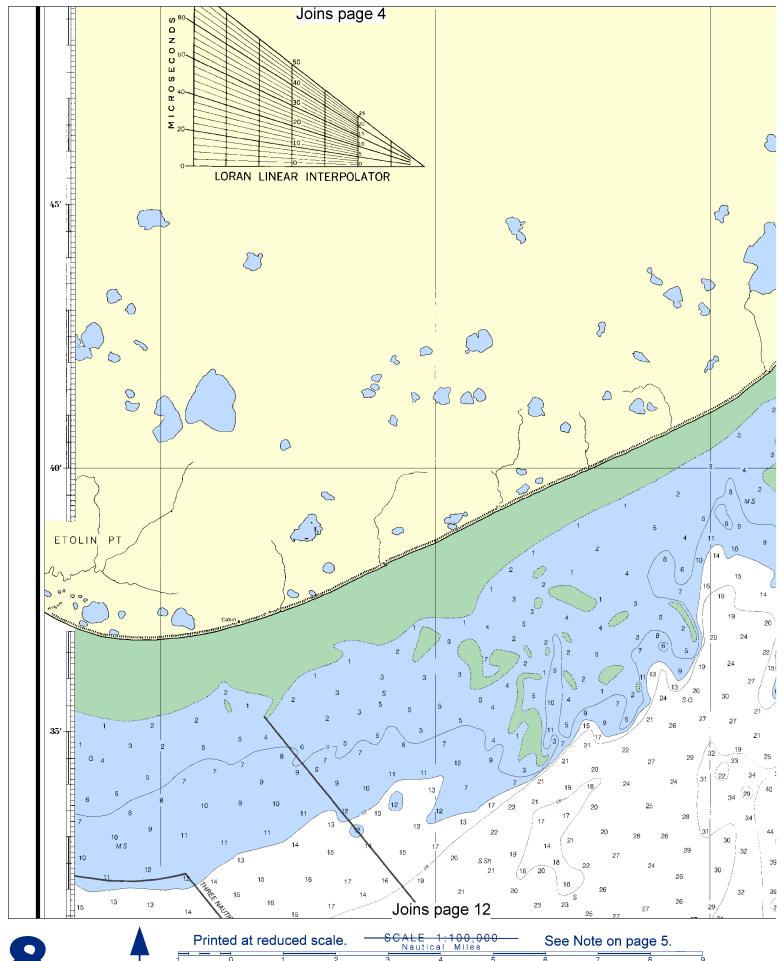


This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,

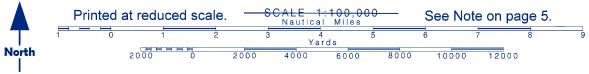
NGA Weekly Notice to Mariners: 0910 2/27/2010,

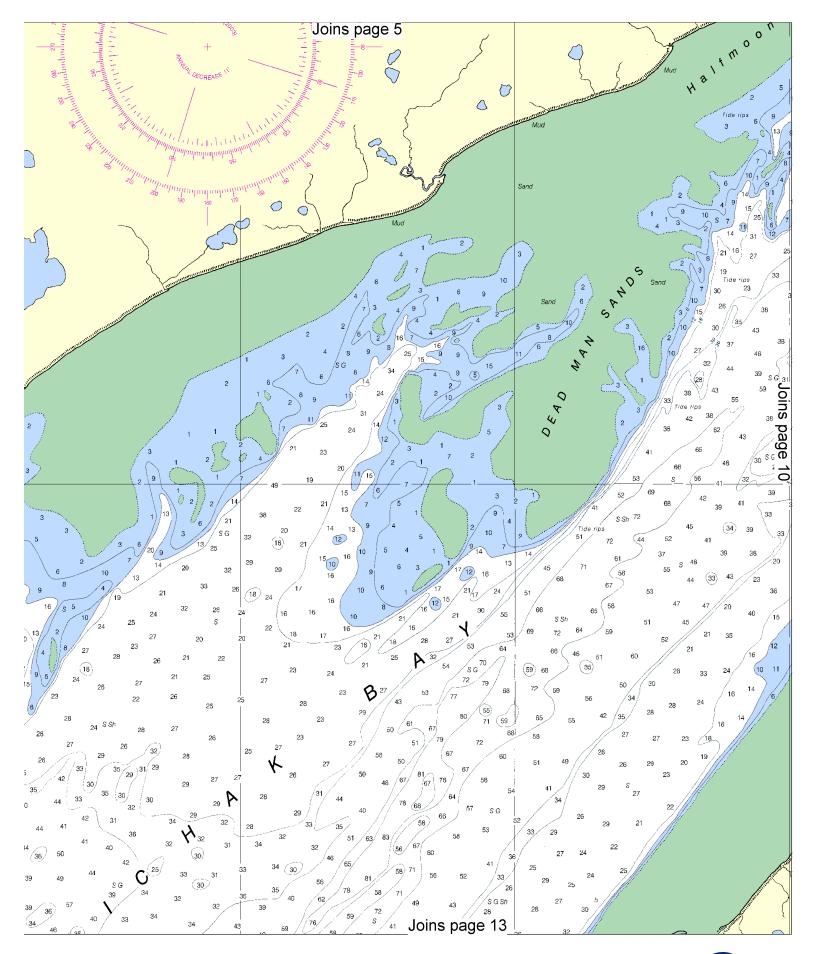
Canadian Coast Guard Notice to Mariners: 0909 9/25/2009.

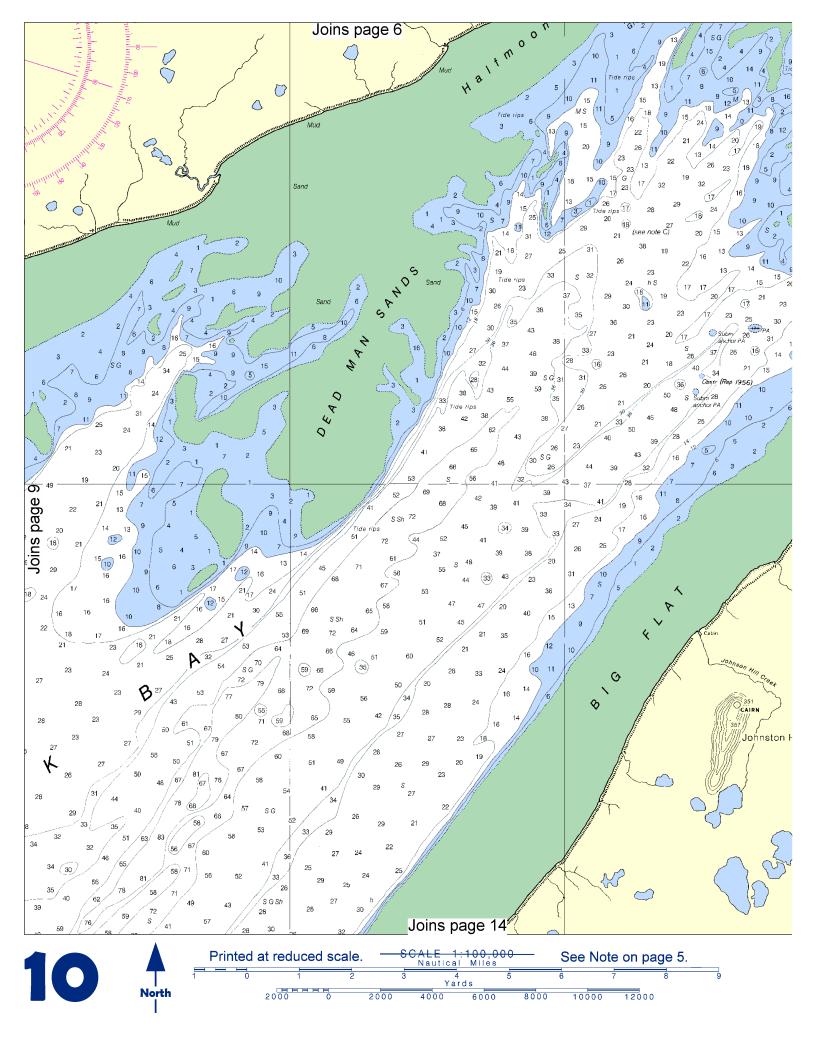


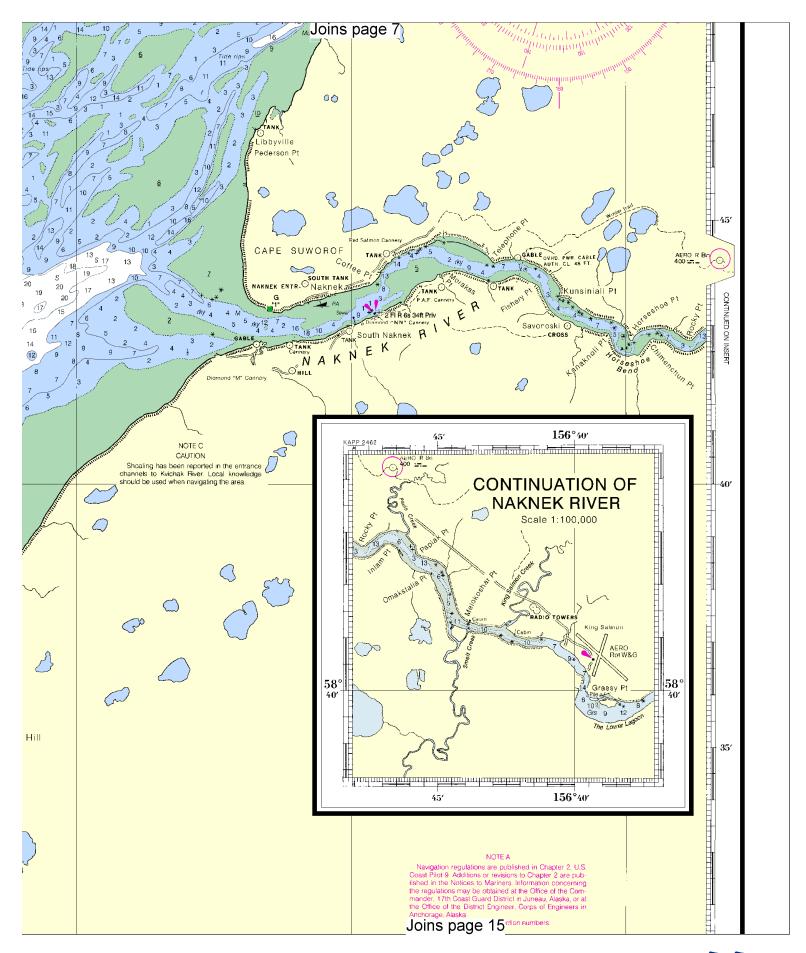


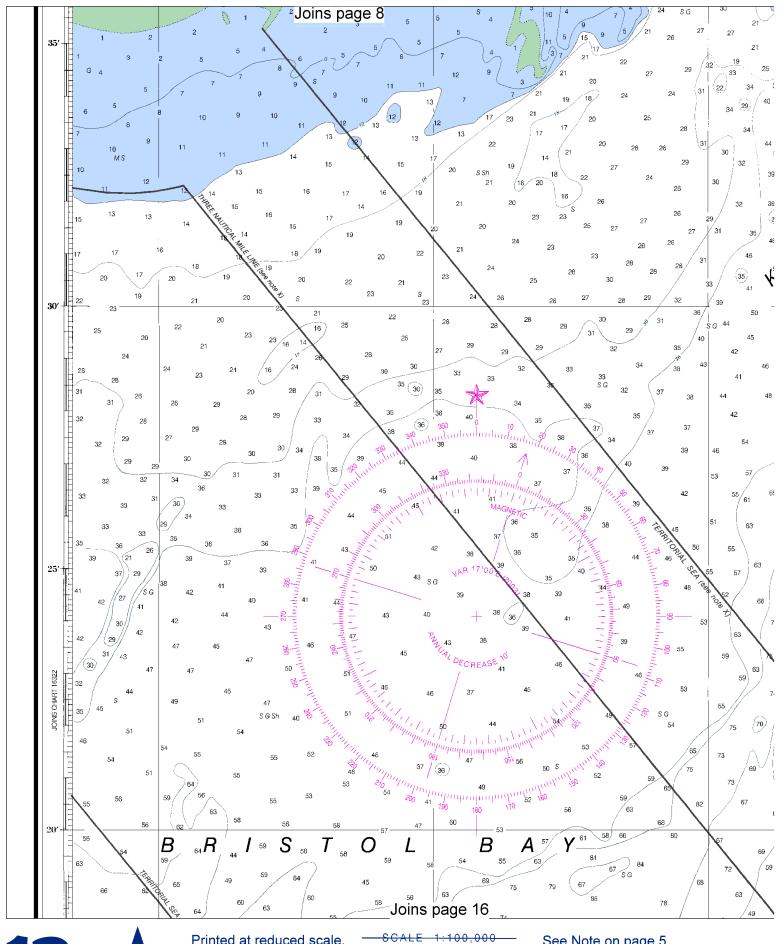




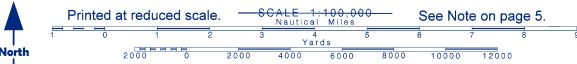


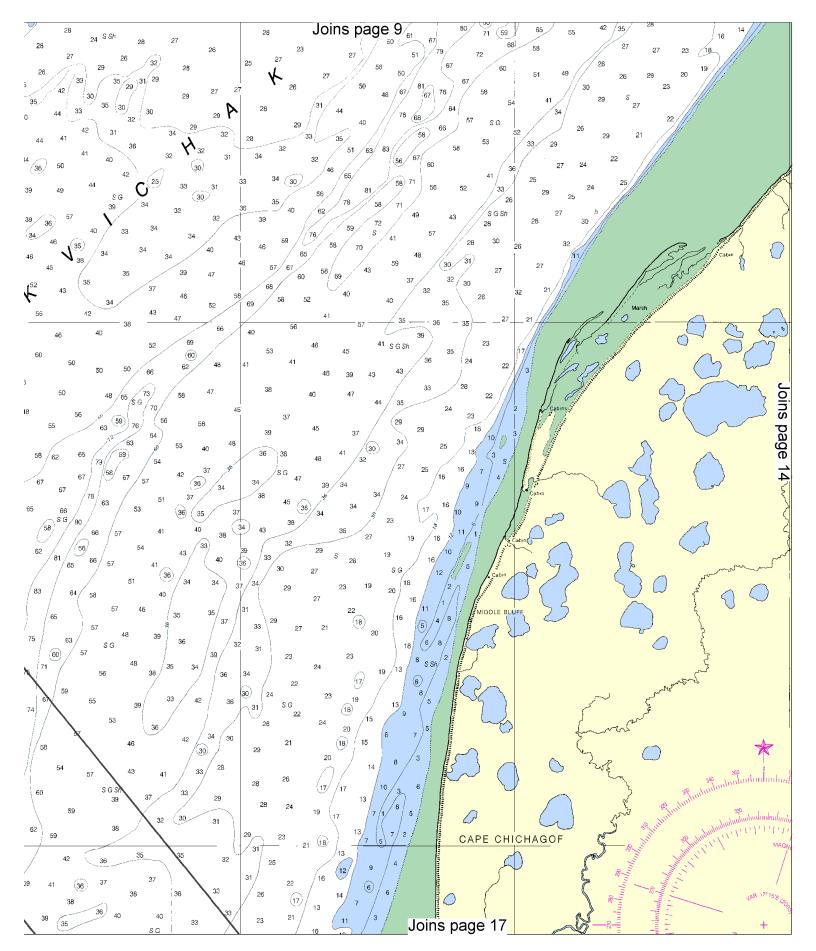


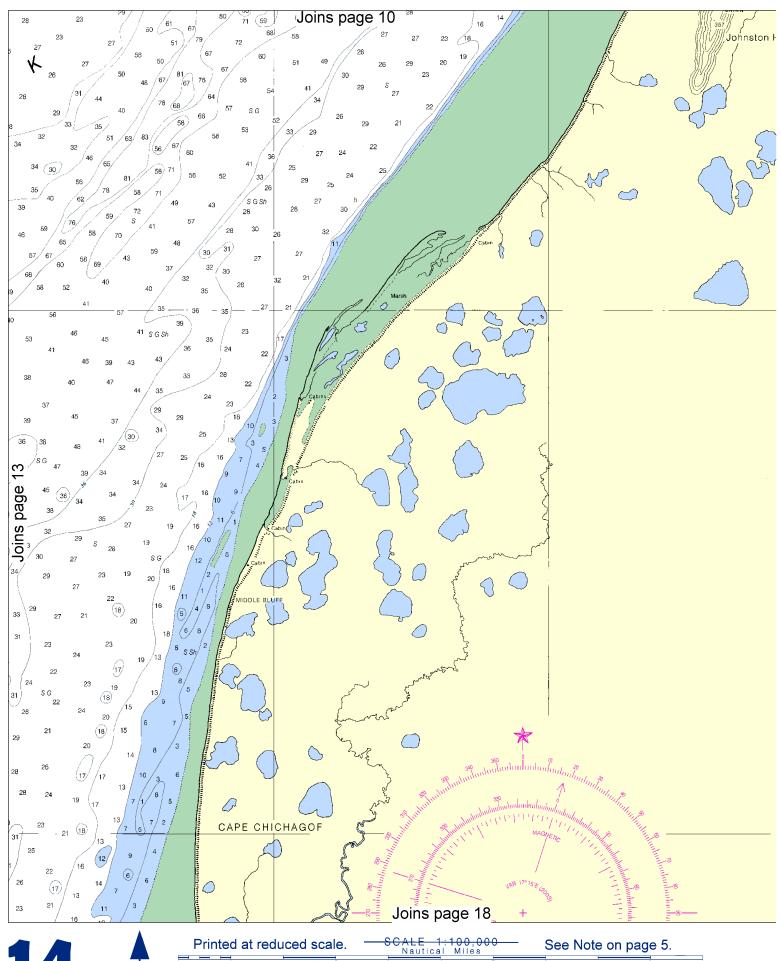




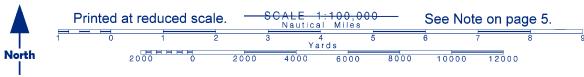


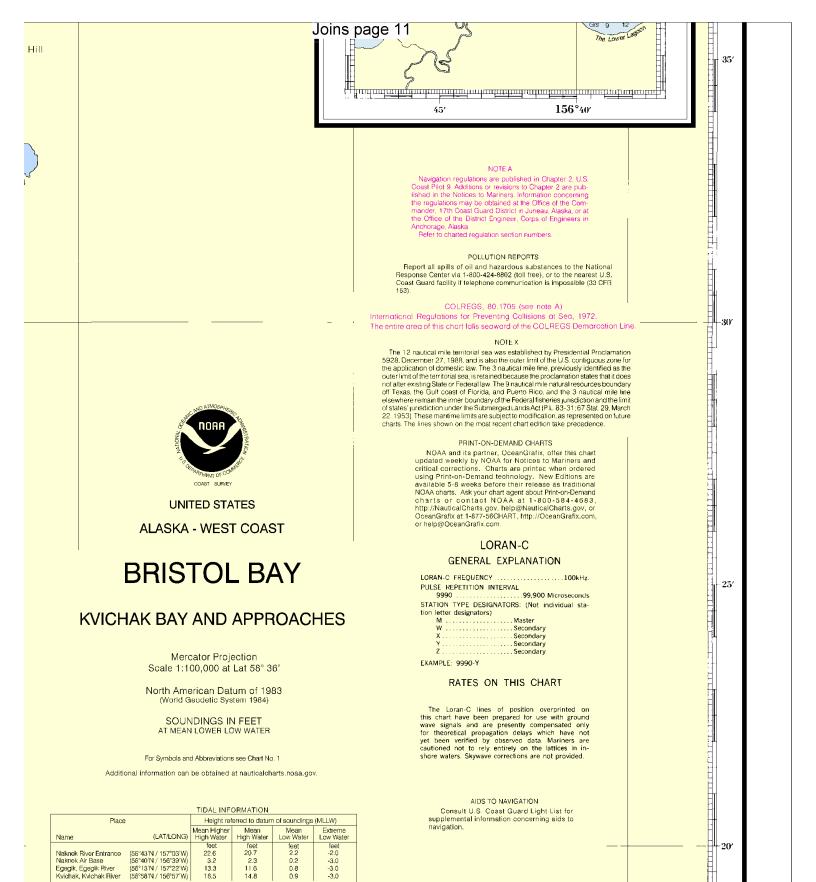












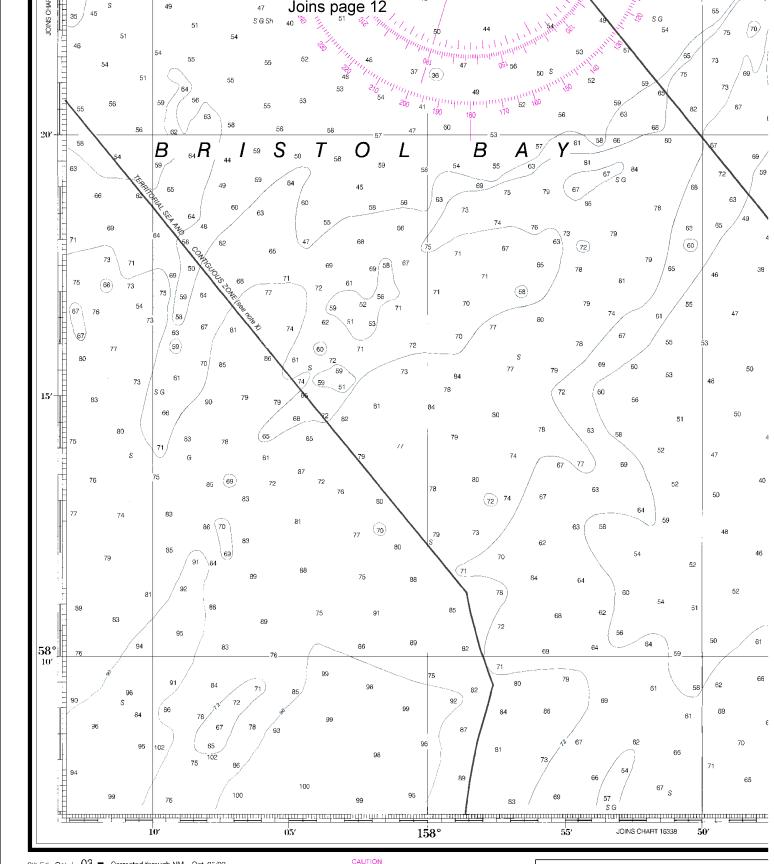
CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See

Joins page 19 onths or when endan-

Note: Currents of 3 to 4 knots or more may be encountered in Naknek and Kviche See Tidal Current Tables, Pacific Coast of North America and Asia for predictions.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)



LORAN-C OVERPRINTED

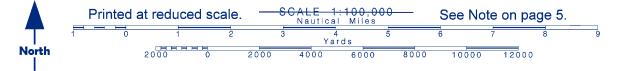
9th Ed., Oct. / 03 Corrected through NM Oct. 25/03 Corrected through LNM Oct. 14/03

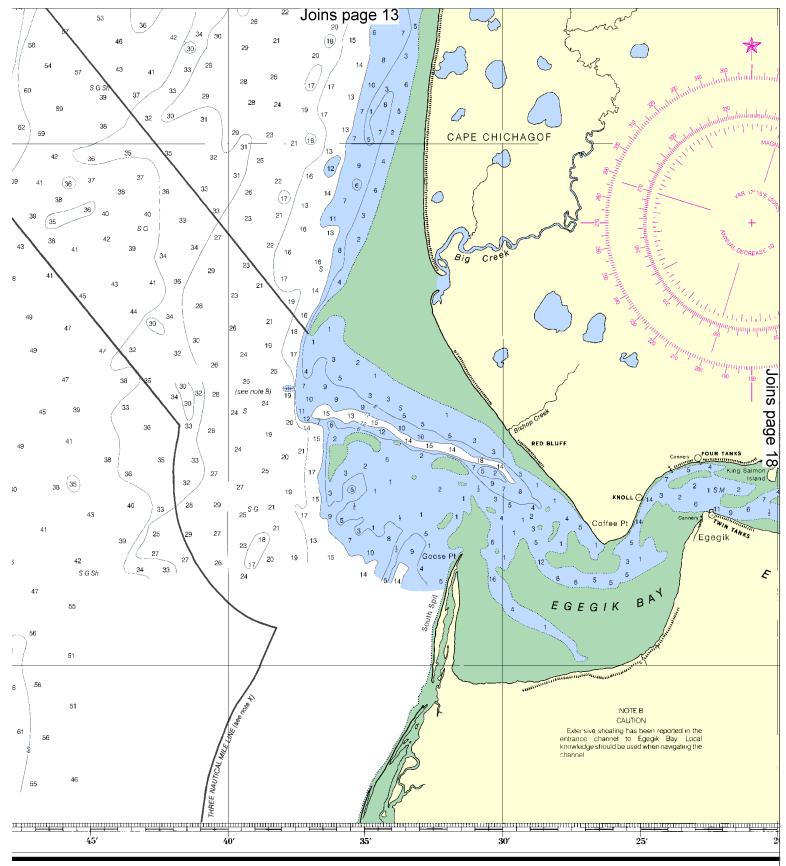
This chart has been corrected from the Notice to Mariners (NM) published

weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The Ocean Service encourages users to submit corrections, additions, or comi improving this chart to the Chief, Marine Chart Division (N/CS2), Nation Service, NOAA, Silver Spring, Maryland 20910-3282.



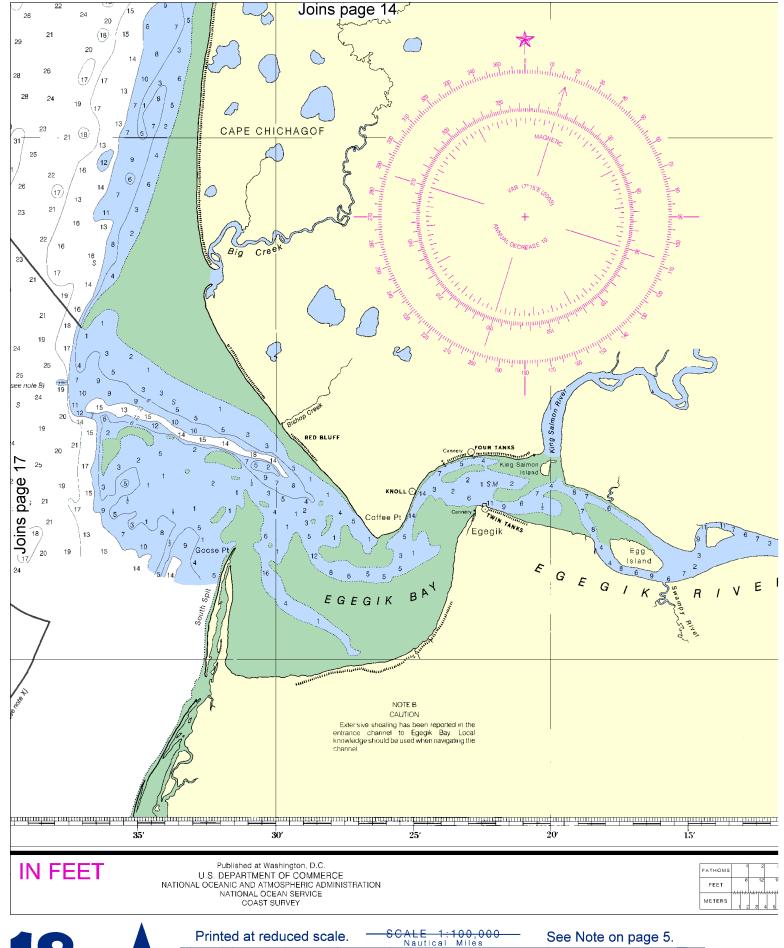


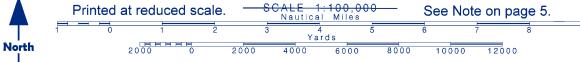


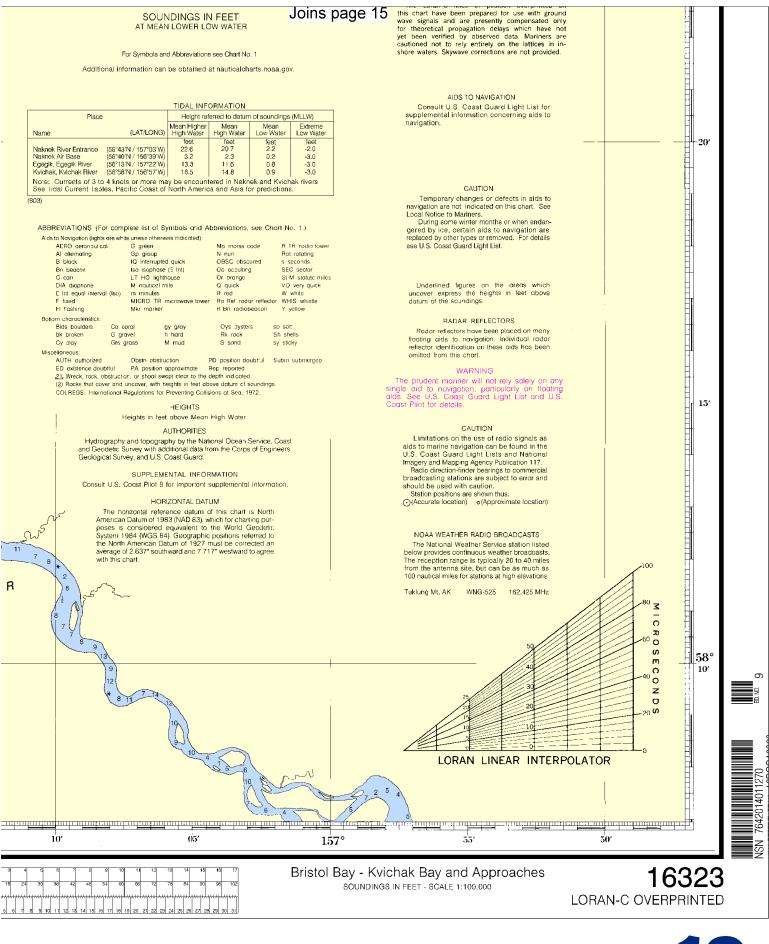
The National mments for onal Ocean

SOUNDINGS IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY







EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue (Pacific Coord) – 510-437-3700

Coast Guard Search & Rescue (RCC Juneau) – 907-463-2000

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts — These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENCs®) -

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNCs[™]) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketChartsTM – PocketChartsTM are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm.

Internet Sites: www.Noa.gov, <a href="